

## Lesson: Archeologist Detectives: Prehistoric technology (tool) reproduction for art, storage and clothing

### Key Learning Objectives

- Young archaeologist detectives will experiment to find out how ancient people created and used new technology (tools) for making art, clothing and storage.
- They will test different materials to determine which have the properties that are best suited for their purpose.

### 21st Century Skills, College & Career Connections

- Ancient technology was on the cutting edge at its conception. What new technologies will our students develop that are on the cutting edge?
- Consider how learning about the past will help us with the future

### Safety First

Set expectations that:

- Archeologists will build peaceful objects for making art, clothing and storage.
- Any dangerous tools or weapons such as spears, axes or knives (even if they are for cooking) will be taken away and the archeologist may start over on a different tool
- Archeologists are not to taste materials or to put anything on or in their bodies

### Key Terms/Techniques:

- Archeologist: a person who studies human history and prehistory through the excavation of sites and the analysis of artifacts and other physical remains.

### Grade level:

- K-3

### Content Standards:

- 1st Grade Student Learning Objective: Students will learn to create art by applying a specific style of ancient art
- 2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose

### References:

- Lesson developed for AASP by C. Fellbaum Dec 2017
- Inspired by: Alejandra Chavez: Cave Art Comes Alive! <https://artlessonsforkids.me/2009/03/15/cave-art-comes-alive/>
- Text adapted from: <http://www.ushistory.org/civ/2d.asp>

### Supplies:

- Hole punches
- Paper bags
- Large sheets of brown paper
- Cardboard
- Card of sinew
- Popsicle sticks
- Yarn
- Buffalo teeth

### Action Arts & Science Program

605-367-7397 ext. 2326  
cfellbaum@washingtonpavilion.org

Plan for high student engagement throughout the kick off that emphasizes student learning through questioning and including student assistants in the demo.

## Getting started

Lead discussion on the background info, below. Plan for high student engagement throughout the kick off that emphasizes student learning through questioning and including students in demos. Let them know we'll clean up and re-group at the end to demonstrate their tools for the class.

Demo basic techniques:

- Set the expectation that we will only build peaceful objects for making art, clothing and storage.
- Any dangerous weapons or tools such as spears, axes or knives (even if they are for cooking) will be taken away and the archeologist may start over on a different tool
- Punch rows of holes along the edges of paper or cardboard and use sinew or yarn to sew them together
- Use sinew to lash cardboard and popsicle sticks together
- Show how folding paper can make pockets
- Show how a button is made from a small cardboard circle with a paper punch holes
- Give them a challenge such as "build a container to keep your bison tooth or art supplies, such as fragile charcoal, safe while traveling"

Clean up, re-group and have archeologist demonstrate their tools

## Background

People of the Stone Age did not have the luxury of Googling how to make tools, clothing, art, hunt etc. Nor could they dial 911 when a fire threatened them. Rather, they had to invent tools and harness the power of fire. But it was their experiments in tool-making that ultimately led to TV, cell phones, and computers.

Living in the computer-driven Information Age, we don't necessarily think of fire or tools as technologies. But by definition technology refers to the "practical application of knowledge in a certain area." Learning how to tame and use fire proved an invaluable technological advance in human development.

Learning how to sharpen a flint, attach a flint to a piece of wood to create a spear, then understanding how to use flint on other pieces of wood to create digging tools were all technological leaps along with controlling fire, cooking and farming.

Archaeologists have found Stone Age tools 25,000-50,000 year-old all over the world. The most common are daggers and spear points for hunting, hand axes and choppers for cutting up meat and scrapers for cleaning animal hides. Other tools were used to dig roots, peel bark and remove the skins of animals. Later, splinters of bones were used as needles and fishhooks. A very important tool for early man was flakes struck from flint. They could cut deeply into big game for butchering.

Cro-Magnons, who lived approximately 25,000 years ago, introduced tools such as the bow and arrow, fishhooks, fish spears and harpoons that were constructed from bones and antlers of animals. Logs were hollowed out to create canoes. Crossing rivers and deep-water fishing became possible.

Advances in tool-making technology led to advances in agriculture. And farming revolutionized the world and set prehistoric humans on a course toward modernity. Inventions such as the plow helped in the planting of seeds. No longer did humans have to depend on the luck of the hunt. Their food supply became much more certain. Permanent settlements were soon to follow. Animals were raised for food as well as to do work. Goats, for instance, were sources of milk and meat. Dogs were used to aid in hunting wild animals.

Modern, civilized societies began to emerge around the globe. Human life as we know it started to flourish.